

Title (en)

VOLTAGE REGULATOR WITH BYPASS MODE

Title (de)

SPANNUNGSREGLER MIT BYPASS-MODUS

Title (fr)

REGULATEUR DE TENSION A MODE DE DERIVATION

Publication

**EP 1846928 A2 20071024 (EN)**

Application

**EP 06719445 A 20060124**

Priority

- US 2006002589 W 20060124
- US 4261005 A 20050125

Abstract (en)

[origin: US2006164054A1] A step down voltage regulator with bypass comprised of devices designed to operate over a maximum rated voltage lower than a supply voltage. The regulator includes an output regulation device coupled to the supply voltage and an output. An output device protection circuit is provided which is responsive to the supply voltage and the output to ensure that the maximum rated voltage of the output regulation device is not exceeded. A bypass circuit having a bypass output device and being coupled to the supply voltage is provided with a protection circuit. The output regulation devices comprise p-channel transistors, and may have an operating maximum rated voltage in a range of 2.7-3.6 volts with the supply voltage is in a range of 4.4-5.25 volts, or 2.9-3.5 volts.

IPC 8 full level

**G11C 5/14** (2006.01); **G05F 1/46** (2006.01); **G05F 1/565** (2006.01); **H02M 3/158** (2006.01)

CPC (source: EP KR US)

**G11C 5/147** (2013.01 - EP US); **G11C 16/26** (2013.01 - KR); **G11C 16/30** (2013.01 - KR); **G11C 29/02** (2013.01 - EP US);  
**G11C 29/021** (2013.01 - EP US); **G11C 29/028** (2013.01 - EP US)

Cited by

WO2011085775A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2006164054 A1 20060727; US 7391193 B2 20080624;** CN 101185139 A 20080521; EP 1846928 A2 20071024; JP 2008532108 A 20080814;  
KR 20070113198 A 20071128; TW 200641573 A 20061201; WO 2006081283 A2 20060803; WO 2006081283 A3 20060921

DOCDB simple family (application)

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KR 20077017069 A 20070724; TW 95102861 A 20060125; US 2006002589 W 20060124